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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER
JACK, TODD M

ART UNIT	PAPER NUMBER
2133	

DATE MAILED: 11/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>*10 January 2002*</u>.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>*1-29*</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>*1-29*</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>*10 January 2002*</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>05/10/02</u>.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☒ Other: <u>*Office Action*</u>.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for

all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described
> as set forth in section 102 of this title, if the differences between the subject matter sought to
> be patented and the prior art are such that the subject matter as a whole would have been
> obvious at the time the invention was made to a person having ordinary skill in the art to which
> said subject matter pertains. Patentability shall not be negatived by the manner in which the
> invention was made.

Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Peyravian et al. (6,742,119 B1) in view of Messing (6,745,327), further in

view of Fischer (5,422,953).

Claim 1: Peyravian teaches a time-stamping procedure which time-stamps the

data file (col. 1, lines 30-38), a time-stamping authority generate a certified time

stamp receipt where the certification authority digitally signs the receipt (col. 2,

lines 3-19), and the time stamp authority obtains the current time from a trusted

source (col. 4, lines 3-6). Peyravian fails to teach clocks to be synchronized with

an accepted standard source of time wherein each of the signed certificates

certifies that two clocks are synchronized, a document identification based upon

which the identity of the digital document can be verified, a cryptographic

signature of a set of data comprising, the identification of the issuing clock, the

identification of the time, and the document identifier. Messing teaches the user

secret and certificate properties match those on the certification authority's

computer (col. 6, lines 32-36), data to be signed (col. 6, lines 44-45), the

information presented by the user is combined with the date-time stamp of the

system clock (col. 6, lines 46-47), and certificate and the document or data to be signed is received for processing by the server, where the information presented by the user is combined with the date-time stamp of the system clock (col. 6, lines 43-44). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the system by Peyravian by including a document identifier and a cryptographic signature. This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so, as suggested by Messing in order to provide the capability to confirm that the document/data is from an authorized source. Fischer teaches dual clocks are used where physical phenomena will affect them in different ways resulting in the use of a second-order correction to detect and account for on-going clock drift (col. 5, lines 30-47).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the system by Peyravian by synchronizing the clocks. This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so, as suggested by Fischer in order to obtain two clocks that are producing relative time.

Claim 2: Further, Peyravian fails to teach a time stamp comprising at least one the signed certificates. Messing teaches a signed certificate contained in a trusted clock (col. 6, lines 11-21) where the digital value/document is combined with a current date and time (col. 6, lines 43-44).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the system by Peyravian by incorporating a signed certificate. This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so, as suggested by Messing to identify a certificate as authentic, thus preventing worms and viruses from entering the system.

Claim 3: Further, Peyravian fails to teach a time stamp comprising at least one the signed certificates. Messing teaches a signed certificate contained in a trusted clock (col. 6, lines 11-21) where the digital value/document is combined with a current date and time (col. 6, lines 43-44).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the system by Peyravian by incorporating a signed certificate. This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so, as suggested by Messing to identify a certificate as authentic, thus preventing worms and viruses from entering the system.

Claim 4: Further, Peyravian fails to teach a time stamp comprising at least one the signed certificates. Messing teaches the user secret and certificate properties match those on the certification authority's computer (col. 6, lines 32-36).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the system by Peyravian by identifying a document. This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so, as suggested by Messing to authenticate a document in an effort to increase security.

Claim 5: Further, Peyravian fails to teach at least one of the signed certificates is cryptographically signed. Messing teaches the date and time stamp as well as the certificate information will be included in the information to be signed (col. 6, lines 48-53).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the system by Peyravian by having a certificate cryptographically signed. This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so, as suggested by Messing to ensure that the signature is authentic and that unauthorized entry is permitted.

Claim 6: Further, Peyravian fails to teach a link through which the chain of certificates can be accessed. Fischer teaches embodies require two certificates binding the individual and demonstrating a secure clock device (col. 6, lines 32-35).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the system by Peyravian by accessing certificates. This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so, as suggested by Fischer to obtain certificates for more than one digital document at any one time.

Claim 7: Further, Peyravian fails to teach an identification of a certifying clock. Fischer teaches performing notarization using a secure device embodying a trusted clock to countersign important digital signatures (col. 1, lines 32-42).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the system by Peyravian by identification of a certifying clock. This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so, as suggested by Fischer to allow the user to know the source of the time value in case of a variation with a recorded value.

Claim 8: Further, Peyravian fails to teach an identification of the time. Fischer teaches a notary device accepts the current date/time from a master clock having a high degree of accuracy (col. 4, lines 48-51).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the system by Peyravian by identification of the time. This modification would have been obvious because a

person having ordinary skill in the art would have been motivated to do so, as suggested by Fischer to allow a source of the time to be made available for reasons of interpretation.

Claim 9: Further, Peyravian fails to teach a link through which the chain of at least two certificates. Fischer teaches embodies require two certificates binding the individual and demonstrating a secure clock device (col. 6, lines 32-35).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the system by Peyravian by having two certificates. This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so, as suggested by Fischer to obtain certificates for more than one digital document at any one time.

Claim 10: Peyravian teaches a time-stamping procedure which time-stamps the data file (col. 1, lines 30-38), a time-stamping authority generate a certified time stamp receipt where the certification authority digitally signs the receipt (col. 2, lines 3-19), and the time stamp authority obtains the current time from a trusted source (col. 4, lines 3-6). Peyravian fails to teach clocks to be synchronized with an accepted standard source of time wherein each of the signed certificates certifies that two clocks are synchronized, a document identification based upon which the identity of the digital document can be verified, a cryptographic signature of a set of data comprising, the identification of the issuing clock, the

identification of the time, and the document identifier. Messing teaches the user secret and certificate properties match those on the certification authority's computer (col. 6, lines 32-36), data to be signed (col. 6, lines 44-45), the information presented by the user is combined with the date-time stamp of the system clock (col. 6, lines 46-47), and certificate and the document or data to be signed is received for processing by the server, where the information presented by the user is combined with the date-time stamp of the system clock (col. 6, lines 43-44). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the system by Peyravian by including a document identifier and a cryptographic signature. This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so, as suggested by Messing in order to provide the capability to confirm that the document/data is from an authorized source. Fischer teaches dual clocks are used where physical phenomena will affect them in different ways resulting in the use of a second-order correction to detect and account for on-going clock drift (col. 5, lines 30-47).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the system by Peyravian by synchronizing the clocks. This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so, as suggested by Fischer in order to obtain two clocks that are producing relative time.

Claim 11: Further, Peyravian fails to teach a time stamp comprising at least one the signed certificates. Messing teaches a signed certificate contained in a trusted clock (col. 6, lines 11-21) where the digital value/document is combined with a current date and time (col. 6, lines 43-44).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the system by Peyravian by incorporating a signed certificate. This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so, as suggested by Messing to identify a certificate as authentic, thus preventing worms and viruses from entering the system.

Claim 12: Further, Peyravian fails to teach a time stamp comprising at least one the signed certificates. Messing teaches a signed certificate contained in a trusted clock (col. 6, lines 11-21) where the digital value/document is combined with a current date and time (col. 6, lines 43-44).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the system by Peyravian by incorporating a signed certificate. This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so, as suggested by Messing to identify a certificate as authentic, thus preventing worms and viruses from entering the system.

Claim 13: Further, Peyravian fails to teach a time stamp comprising at least one the signed certificates. Messing teaches the user secret and certificate properties match those on the certification authority's computer (col. 6, lines 32-36).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the system by Peyravian by identifying a document. This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so, as suggested by Messing to authenticate a document in an effort to increase security.

Claim 14: Further, Peyravian fails to teach at least one of the signed certificates is cryptographically signed. Messing teaches the date and time stamp as well as the certificate information will be included in the information to be signed (col. 6, lines 48-53).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the system by Peyravian by having a certificate cryptographically signed. This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so, as suggested by Messing to ensure that the signature is authentic and that unauthorized entry is permitted.

Claim 15: Further, Peyravian fails to teach comprising concatenating the identification of the trusted source of time, the identification of the time, and the document identifier. Messing teaches a date and time with an individual's certificate information included in the information that is signed by the server computer (document identifier) (col. 6, lines 48-51) and can only be changed upon detection (col. 6, lines 53-54).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the system by Peyravian by concatenating identifiers. This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so, as suggested by Messing to place the identifiers in a form to place in a certificate for ease of transmission and authentication.

Claim 16: Further, Peyravian fails to teach concatenating at least one of the signed certificates. Fischer teaches two immediate certificates (col. 6, lines 32-35) where it is inferred that the two are concatenated.

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the system by Peyravian by having concatenated certificates. This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so, as suggested by Messing to allow a full identification of an individual or process while minimizing transmission.

Claim 17: Further, Peyravian fails to teach a link through which the chain of certificates can be accessed. Fischer teaches embodies require two certificates binding the individual and demonstrating a secure clock device (col. 6, lines 32-35).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the system by Peyravian by accessing certificates. This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so, as suggested by Fischer to obtain certificates for more than one digital document at any one time.

Claim 18: Further, Peyravian fails to teach an identification of a certifying clock. Fischer teaches performing notarization using a secure device embodying a trusted clock to countersign important digital signatures (col. 1, lines 32-42).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the system by Peyravian by identification of a certifying clock. This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so, as suggested by Fischer to allow the user to know the source of the time value in case of a variation with a recorded value.

Claim 19: Further, Peyravian fails to teach an identification of the time. Fischer

teaches a notary device accepts the current date/time from a master clock having

a high degree of accuracy (col. 4, lines 48-51).

Therefore, it would have been obvious to a person having ordinary skill in

the art at the time the invention was made to modify the system by Peyravian by

identification of the time. This modification would have been obvious because a

person having ordinary skill in the art would have been motivated to do so, as

suggested by Fischer to allow a source of the time to be made available for

reasons of interpretation.

Claim 20: Further, Peyravian fails to teach a link through which the chain of at

least two certificates. Fischer teaches embodies require two certificates binding

the individual and demonstrating a secure clock device (col. 6, lines 32-35).

Therefore, it would have been obvious to a person having ordinary skill in

the art at the time the invention was made to modify the system by Peyravian by

having two certificates. This modification would have been obvious because a

person having ordinary skill in the art would have been motivated to do so, as

suggested by Fischer to obtain certificates for more than one digital document at

any one time.

Claims 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Peyravian in view of Fischer.

Claim 21: Peyravian teaches the time stamp authority obtains the current time from a trusted source (col. 4, lines 3-6). Peyravian fails to teach synchronized with an accepted standard, wherein each of the signed certificates certifies that two clocks have been determined to be synchronized. Fischer teaches dual clocks are used where physical phenomena will affect them in different ways resulting in the use of a second-order correction to detect and account for on-going clock drift (col. 5, lines 30-47).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the system by Peyravian by synchronizing the clocks. This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so, as suggested by Fischer in order to obtain two clocks that are producing relative time.

Claim 22: Further, Peyravian fails to teach each of the signed certificates identifies a time at which the two clocks have been determined to be synchronized. Fischer teaches insuring that the certificate information provided by the manufacturer of the notary device indicates that the device incorporates a trusted clock value and verifies that the certifying device incorporates trusted time clock (col. 7, lines 37-42).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the system by Peyravian by identifying a time at which two clocks are synchronized. This modification would

have been obvious because a person having ordinary skill in the art would have

been motivated to do so, as suggested by Fischer in order to recognized the

accuracy of the time provided by the clocks.

Claim 23: Further, Peyravian fails to teach each of the signed certificates

identifies the two clocks. Fischer teaches the manufacturer generates a

certificate to indicate that the generated public key is authorized for use with this

particular user's notary device. This signed certificate is associated with the

card. (col. 5, lines 67-68). The signed certificates are identified by two clocks

(col. 7, lines 37-42).

Therefore, it would have been obvious to a person having ordinary skill in

the art at the time the invention was made to modify the system by Peyravian by

identifying the two clocks with assigned certificate. This modification would have

been obvious because a person having ordinary skill in the art would have been

motivated to do so, as suggested by Fischer in order to authenticate the clocks

used for the time stamp.

Claim 24: Further, Peyravian fails to teach a link through which the chain of at

least two certificates. Fischer teaches embodies require two certificates binding

the individual and demonstrating a secure clock device (col. 6, lines 32-35).

Therefore, it would have been obvious to a person having ordinary skill in

the art at the time the invention was made to modify the system by Peyravian by

having two certificates. This modification would have been obvious because a

person having ordinary skill in the art would have been motivated to do so, as suggested by Fischer to obtain certificates for more than one digital document at any one time.

Claims 25-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fischer in view Messing.

Claim 25: Fischer teaches dual clocks are used where physical phenomena will affect them in different ways resulting in the use of a second-order correction to detect and account for on-going clock drift (col. 5, lines 30-47), a first mode of operation uses a single certificate (col. 6, lines 11-12), certifier is known to users whose private key is operated within secured devices with trusted clocks (col. 6, lines 17-21), insuring that the certificate information provided by the manufacturer of the notary device indicates that the device incorporates a trusted clock value and verifies that the certifying device incorporates trusted time clock (col. 7, lines 37-42), data to be signed (col. 6, lines 44-45), the information presented by the user is combined with the date-time stamp of the system clock (col. 6, lines 46-47), certifier is known to users whose private key is operated within secured devices with trusted clocks (col. 6, lines 17-21), and certificate and the document or data to be signed is received for processing by the server, where the information presented by the user is combined with the date-time stamp of the system clock (col. 6, lines 43-44).

Messing teaches the certificate and the document or data to be signed (col. 6, lines 38-52).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the system by Peyravian by including a cryptographic signature. This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so, as suggested by Messing in order to provide the capability to confirm that the document/data is from an authorized source.

Claim 26: Further, Fischer teaches dual clocks are used where physical phenomena will affect them in different ways resulting in the use of a second-order correction to detect and account for on-going clock drift (col. 5, lines 30-47).

Claim 27: Further, Fischer teaches confirmation is made of the identity of the user and the notarized date and time (col. 12, lines 41-43).

Claim 28: Further, Fischer teaches a device produces to digital signatures, which is combined with the current value of the secure clock and be signed with the user's private key (col. 8, lines 47-55).

Claim 29: Further, Fischer teaches a device produces to digital signatures, which is combined with the current value of the secure clock and be signed with the user's private key (col. 8, lines 47-55). It can be inferred that the option of using a digital signature created by each clock is one option.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Todd M Jack whose telephone number is 703-305-1027. The examiner can normally be reached on M-Th, alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady, can be reached on 703-305-9595. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.
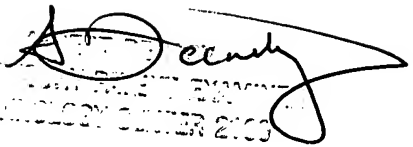
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Art Unit: 2132

Todd Jack
Art Unit 2133

703-305-1027